than robust competition. Although many of the non-LEC commenters justify their proposals in the name of competition, as shown above, the most prominent effect of these proposals is to delay, if not prevent, LECs from receiving relaxed regulatory treatment and the freedom to compete. BellSouth urges the Commission to adopt a plan that focuses on transformation of the marketplace and establishes rules that will allow the marketplace to replace regulation.

IV. CONCLUSION

As BellSouth has shown, no party has presented a credible argument to halt the Commission's progress toward improving the LEC price cap rules and establishing an adaptive regulatory framework that can accommodate the transition toward competition. The time has come for the Commission to put in place a forward-looking regulatory paradigm that anticipates and expects change. Accordingly, the Commission should reject the wait and see approach expressed by some commenters. It is out of step with the realities of the marketplace and promotes an antiquated regulatory philosophy that the Commission, in the Second Notice, has clearly chosen to abandon.

Respectfully submitted,

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January 11, 1996

ATTACHMENT 1

COMMENTS ON PRICING FLEXIBILITY ISSUES

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Comments on Pricing Flexibility Issues

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January 10, 1996

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Introduction

There is an essential contradiction at the core of IXC and CAP/CLEC comment in this phase of the LEC price cap proceeding. On the one hand, the gross economic *in*efficiency of regulatory pricing under the existing regime is readily conceded and even cited as a rationale for promotion of "competition." On the other hand, there is strenuous opposition to even the most tentative steps in the direction of affording LECs greater freedom to price more efficiently and removing regulatory barriers to introduction of new services. This opposition extends to mere contemplation of the *hypothetical* circumstances under which more thoroughgoing regulatory streamlining might be warranted.[1]

In the case of LEC competitors, this opposition can be readily fathomed in economic terms as a plain and simple effort to exploit regulation to hamstring LEC competition. On this view *in*efficient pricing does not represent a regulatory failure; it is instead the *instrument* that regulation utilizes to "promote competition." Efficient pricing discourages competition and thus, it is argued, should not be permitted.[2] To the extent that there exists a separate set of LEC access customers which are not LEC competitors — an increasingly vanishing set — opposition to efficient pricing is, on its face, more difficult to explain. In this regard, it is important to note that smaller IXCs have often been the beneficiaries of competitive handicapping policies in long distance (*viz., e.g.,* the equal unit price policy) and would likely fare less well under an efficient access pricing structure. Effective

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[1] Opposition is not limited to areas where abuses of market power have actually occurred. Nor is it limited to areas where there is evidence that such abuses are likely to occur. Rather, greater regulatory flexibility is opposed wherever creative advocates can *imagine* a potential abuse. Opponents exhibit no comparable creativity in imagining possible market-based *solutions* to imagined abuses. The pursuit of profit as a potential motivating corrective force is discounted virtually completely.

[2] Efficient pricing does discourage competition — *inefficient* competition! In this regard, we note ALTS' incorrect claim (at pp. 10-12 of its *Comments*) that all competition, no matter how inefficient, benefits consumers. That is plainly false. Consider that competition which undermined an average rate scheme would raise prices for some consumers and lower prices for other consumers. The relevant question is whether competition can be expected to produce a more efficient allocation of resources and greater economic welfare *in the aggregate*. Only with efficient competition can there exist a presumption of increase in aggregate economic welfare. The relevant issue is not whether *in*efficient competition should be permitted, but whether it should be encouraged through rigid maintenance of an economically inefficient pricing structure.

competition which rendered economically inefficient pricing unsustainable will *harm* those customer/competitors who benefit from *in*efficient prices.[3]

We note that in its *Notice* the Commission is at pains to stress its desire to foster economically efficient pricing and to remove regulatory barriers to economic efficiency. In this submission, we explain the economic rationale for affording LECs significantly greater pricing *flexibility*, including a modicum of pricing *discretion* (within price-cap constraints), to promote more economically efficient pricing in the current industry operating environment. As we have previously argued, the economically appropriate degree of pricing flexibility is theoretically *invariant* with respect to the degree of actual competition.[4] While the Commission has taken what we regard as sensible steps in the right direction by affording some additional pricing flexibility, we believe that the economically appropriate degree pricing flexibility remains greater than that currently afforded LECs.[5]

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[3] It is interesting to observe that the only IXC with anything good to say, indeed, with virtually *anything* to say about affording LECs a modicum of regulatory relief in the absence of greater competition was AT&T — the carrier which has arguably been the most adversely affected by regulatory access price handicapping. In footnote 12 of its *Comments*, AT&T remarks that, "[I]t may be appropriate to make a small number of the price cap modifications proposed in the *SFNPRM* now, because they may eliminate regulatory requirements that are unnecessary notwithstanding the LECs' monopoly status." Not surprisingly, those carriers which have benefitted most from price handicapping have no wish to see an efficient pricing structure any time soon.

[4] *See* John Haring and Jeffrey H. Rohlfs, "Comments on 'Transition Issues'," *In the Matter of Price Cap Performance Review for Local Exchange Carriers* (CC Docket No. 94-1), April 19, 1994. As we noted therein (pp. 5-6):

> . . . *the standards of reasonability are not themselves a function of the specific means utilized to ensure that the standards are met.* . . . It makes no sense to argue that firms can be afforded the flexibility to price efficiently within a properly defined zone of reasonableness *only if* there is competition — obviously regulated firms should be afforded the same flexibility — if they are not, they cannot mimic competitive performance. Alternatively, insisting that regulated firms price *inefficiently* to afford new entrants profitable opportunities for expansion invites overexpansion and creates a moral hazard. Yet this is, in fact, precisely the position that CAPS are espousing — until competition develops more fully, LECs should be compelled to maintain a price structure that supplies CAPs with profitable opportunities for output expansion. [Footnote omitted; emphasis in original.]

[5] As we noted in our earlier filing (*ibid.*, pp. 14-15):

> . . . under current practice carriers are afforded limited flexibility to adjust individual rates within narrow pricing bands. In practical terms, these constraints serve to soften the edges of change, while affording carriers a modicum of discretion to adjust to changes in market conditions. Unfortunately, in many cases we obviously are not starting from a position of reasonability — current prices are way out of line with what might be construed as economically reasonable. As we have noted, the fact of selective entry provides evidence that current rates for some services are too high from an economic standpoint. In these circumstances, affording carriers only limited discretion to lower their rates or, alternatively, insisting that they run a full-scale regulatory tariffing gauntlet, in essence, serves mainly to provide entrants with a protective pricing umbrella under which to expand.

We have previously acknowledged that the presumption of reasonability and, relatedly, the appropriate degree of pricing discretion may properly be deemed to vary with the degree of effective competition. Nevertheless, given current inefficient price levels, we believe there is a compelling case for significantly greater pricing discretion (in terms of both degree and scope/coverage) in today's operating environment. Similarly, given the economic characteristics of service innovations, we believe the Commission ought to follow the lead of regulators in the United Kingdom and pursue a much more aggressively deregulatory course toward the introduction of new services. Regulatory barriers to innovation impose high penalties in terms of foregone economic welfare and produce minimal benefits. Very minimal showings are justified to police the introduction of new services.

Turning to issues of streamlining, we first describe the economic benefits that attach to the specification of a clear policy roadmap detailing the kinds of policy changes that would be triggered by significant alterations in the competitive operating environment in local markets. It is neither necessary nor desirable for the Commission to cross bridges before it comes to them, but it is both wise and prudent for the Commission to specify in advance what kinds of regulatory policy changes will be triggered by what kinds of market changes. That is the essence of sound policy planning. In determining an appropriate set of policy triggers, it is important for the Commission to avoid specifying decision criteria, the gaming of which by different market participants will undercut their utility as meaningful indicia of competition. In this regard, we offer a critique of the use of market share as an indicator of competition as espoused by Professor Bernheim, who appears to contradict his own policy guidance.

In our view, the approach to assessment of competition adopted by the Commission in long-distance is analytically sound and worth trying to mimic in the local competition context. That approach focuses on conditions of entry and the supply capabilities of rival firms in evaluating the effective degree and extent of competition. By drawing inferences about competition on the basis of evidence on the elasticity of relevant market supplies, this approach exploits information that is theoretically germane and can be economically marshaled. We provide a critical evaluation of MFS' arguments against the use of productive capacity as a useful measure of the existence of power to restrict supply in a particular market.

The fact that there are a large number of local markets makes ease of administration an important consideration in formulating an efficient set of policy rules. While significant variations in

individual market conditions may exist, we believe the Commission can specify a workable set of general policy guidelines based on ascertainable information that will provide a reasonable basis for proceeding in different market contexts.

Pricing Flexibility[6]

With the previously noted exception, IXC and CAP/CLEC comment in the current phase of the LEC price cap proceeding is virtually uniform in its view that no additional pricing freedom should be afforded LECs until the markets in which they operate become competitive.[7] Of course, firms operating in perfectly competitive/contestable markets actually possess no meaningful pricing freedom. Perfect competitors are pure price takers who sell at the price established by supply and

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[6] By pricing flexibility, we mean the freedom to raise some rates and lower others while satisfying an overall price-cap constraint.

[7] *Price Cap Performance Review for Local Exchange Carriers,* CC Docket No. 94-1, FCC 95-393 (released September 20, 1995):

> MFS is concerned that, through the Commission's significant proposed revisions to its Price Cap plan for ('LECs'), the Commission may to [*sic*] alter existing pricing regulations before competition has yet arrived. . . . This potential for LEC competitive abuse makes it imperative for the Commission to preface new pricing flexibility for the LECs *only upon a showing of actual competition,* and to require full cost justification for all new services, as well as for alternative pricing plans. [*Comments of MFS Communications Company, Inc.*, pp. 1-2, emphasis in original.]

According to Teleport,

> The problem with implementing any of the Commission's proposals, including its first stage plan, is that there is simply no evidence that competition has advanced in the access market to a point where any dilution in the Commission's current price cap policies is appropriate. [*Comments of Teleport Communications Group Inc.*, p. 2.]

According to ALTS,

> . . . the *Second NPRM*'s proposal to lift pricing regulation *before* the emergence of competition lacks any economic or institutional foundation. It should be absolutely clear to the Commission that the 'alternative' approach of linking regulatory changes with improvements in the competitive environment is, in fact, the only meaningful choice for two compelling reasons. [*Comments of the Association for Local Telecommunications Services*, p. ii, emphasis in original.]

According to AT&T,

> Given the LECs' monopoly position, the Commission should not expend current resources to relax price cap rules significantly. [*Comments of AT&T Corp.*, p. i.]

At page 1 of its submission,

> MCI opposes granting additional pricing flexibility to the LECs, unless that flexibility is tied to reductions in access rates that will result in rates set at their economic cost. [*Comments of MCI.*]

There is a special irony in MCI's stated position in that it flies so directly in the face of sound economic principles. Pricing flexibility is especially important in circumstances where, because of significant economies of scale and scope and regulatory and political decisions to, in effect, tax the use of particular services to subsidize consumption of others, there are substantial indirect cost burdens to be recovered. Failure to permit flexibility in pricing to recover such burdens *guarantees* failure to maximize economic welfare.

demand in the marketplace. Firms in perfectly contestable markets are summarily replaced if they fail to charge efficient (quasi-optimal Ramsey) prices.

It would be one thing to argue (as many, perhaps somewhat naively, have) that regulation is needed in the absence of effective competition to ensure against monopoly pricing. This is, of course, the traditional normative economic rationale for price regulation in the absence of effective competition. The problem for those who espouse this argument in the instant context is that *actual* regulation is far more a cause of than a cure for current pricing inefficiency. *Efficient* price regulation would produce the same rates efficient competition would, but actual price regulation is, for a variety of reasons, not producing efficient rates.[8] Actual regulation in the instant context has indisputably produced a set of rates wildly at odds with efficient rates. It is disingenuous on its face to point to existing regulation as needed to protect against inefficient pricing. Existing regulation may produce "just and reasonable" rates, but it clearly does not produce economically efficient rates.

The Commission should not be fooled — support for continued rigid regulation does not primarily reflect fear that, absent such regulation, inefficient rates would be charged. Inefficient rates are being charged now under rigid regulation. Expressed support for rigid regulation mainly reflects fear that, absent such regulation, *more* efficient rates would be charged thereby rendering competition with incumbent suppliers more difficult.[9] Rigid regulation is more accurately described as an instrument for the creation rather than the correction of pricing inefficiency. Inefficient regulatory pricing policies create profit opportunities, the exploitation of which regulatory competition policies are simultaneously assiduously seeking to facilitate.[10] A competitive handicapping regime attempts, in effect, to promote competition by limiting it.

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[8] Actual regulation, notwithstanding the lip service paid to economic efficiency, pursues an expansive and conflicting set of objectives that includes the well-being of particular classes of consumers and competitors. Traditional approaches to regulation are constitutionally incapable of producing efficient prices even were such prices the overriding goal of regulation, which, they are, of course, manifestly not.

[9] If the result of less regulation were inefficiently high prices, competitors would benefit by being presented with a profit opportunity — hardly a basis for complaint.

[10] There is a perverse complementarity about this approach. A genuinely complementary set of policies would uniformly promote efficient pricing.

Efficient Pricing

The characteristics of *efficient* telecommunications service prices do not depend on the prevailing market structure. In the absence of important externalities,[11] effective competition will tend to produce economically efficient rates, and an effective competitive process may be the only feasible way of actually achieving something approaching efficient rates, but the characteristics of efficient rates depend, in the first instance, on conditions of supply and demand rather than market structure. Indeed, the premise of the normative view of economic regulation referred to earlier is precisely that regulation can supply a means (albeit imperfect) to produce efficient rates in the absence of competition. Stated alternatively: If a regulated monopoly is not permitted to charge the same rates that would be established in a perfectly competitive/contestable market, how can regulators hope to mimic the performance of a competitive market and provide an effective substitute for competition where it is infeasible?

Economically efficient rates cover incremental costs of production and vary inversely with (super)elasticities of demand perceived by the firm.[12] An important feature of economically efficient rates, particularly in telecommunications where there are generally thought to be significant economies of scale and scope and there are significant cost burdens arising from regulatory pursuit of social objectives, is that efficient rates are necessarily demand-based as well as cost-based. Information about variations in demand intensities is exploited to minimize the cost (welfare losses) associated with the need to depart from strict marginal-cost pricing. If regulation is to replicate the efficient results a fully contestable market would produce in this type of circumstance, it must necessarily take variations in demand elasticities into account just as the firms operating in a fully contestable environment would.[13]

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[11] Telecommunications services do, of course, frequently exhibit network externalities, and such externalities generally need to be considered in evaluating pricing for local services. Network externalities have less relevance to interstate access pricing issues (apart from SLCs).

[12] *See* William J. Baumol and J. Gregory Sidak, *Toward Competition in Local Telephony* (MIT/AEI: 1994); Haring and Rohlfs, *op. cit.*, and Jeffrey H. Rohlfs, "Economically Efficient Bell System Pricing," Bell Labs Economic Discussion Paper #138, 1978.

[13] As Baumol & Sidak (pp. 50-51) remark:
One clear implication of Ramsey analysis is that where economies or diseconomies of scale are present, both the state of demand and the structure of costs *must* be taken into account in the setting of
(continued...)

Failure to permit adequately demand-based pricing necessarily implies regulatory failure to reproduce the rates that would be established in a perfectly functioning market with all the adverse consequences for economic welfare this implies. This is not to imply that such rates may not ultimately be established — effective competition guarantees that they will be. What the regulatory failure to be consistent — to accept the competitive consequences while willing the competitive means — implies is a competitive process that is itself distorted by regulation and characterized by needless waste and inefficiency

As we argued in our earlier submission to the Commission, to promote economic efficiency, LECs should be afforded the *same* pricing flexibility as firms operating in fully competitive markets — no more but no less. Firms in competitive markets do not possess the power to raise prices to monopolistic levels, but they do possess and regularly exercise the power to adjust prices, often with substantial rapidity, to reflect changes in operating conditions that affect perceived elasticities of demand. Failure to afford adequate pricing flexibility imposes large costs on the economy in the form of economic welfare losses.[14]

Before turning to the issue of pricing *discretion*, a few words about price predation are in order since this issue looms so large in the filings of LEC competitors.[15] An appropriate public policy toward predatory pricing must balance expected losses from two types of failures: losses from the

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[13] (...continued)
efficient prices. . . . The solution toward which regulation of telecommunications and of other industries has moved, and the solution recommended by most economists engaged in the formulation of regulatory practice, is to divide the task into two parts. The first consists of imposing constraints upon the setting of prices by the firm—constraints derived from the competitive-market model just described, and which, fortunately, can be expressed in the required quantitative terms with the aid of cost information alone. The second part of the price-determination process is then left to management in the regulated firm, whose self-interest will lead it to take demand conditions into account. The regulated firm is prohibited from selecting any prices that violate the cost-based constraints adopted by the regulator; but within those limits the firm is granted the freedom to select the prices that best promote its interests. [Emphasis in original.]

[14] Many demands for telecommunications services reflect their use as inputs to production processes. Excessive price markups may cause the prices of products in which they are embodied to depart even more from efficient levels. Excessive markups may be subjected to geometric expansion each time the input or intermediate product in which it is embodied are sold to the level of production or distribution. In the professional literature, this phenomenon is referred to as the problem of "progressive cumulation of interstitial markups" or of "cumulated myopic marginalization." *See* F.M. Scherer, *Industrial Market Structure and Economic Performance* (1980), pp. 300-302; and A.E. Kahn, *The Economics of Regulation*, Vol. 1 (1970), p. 145.

[15] Cf. the Statement of William Page Montgomery, attached to ALTS' Comments, in this regard.

failure to prevent predation when it is really occurring and losses from failure to permit efficient competition. A policy that strictly limited price competition to prevent predation from occurring would plainly impose large losses on the economy by limiting efficient competition. In an operating environment where current prices generally exceed economically efficient prices by a significant amount, complaints about prices that are *too low* ring resoundingly hollow. Naturally LEC competitors would prefer to compete against a set of inefficient prices, but consumers (in the aggregate) do not benefit from competition that is not efficient.

Price predation is usually not accorded much plausibility by economists in part because price predation does not pose a very credible threat compared to other types of strategic ploys.[16] A price predation strategy also does not appear to make much sense when competitors have significant sunk investments and where the threat of reentry is thus highly credible. Regulators tend to attach greater credence to the possibility of price predation because the nonuniform threat or actuality of competition in different markets frequently leads to price variations. Price differences "look like" a discriminatory response to competition, although they may be easily accounted for in terms of the economics of supply and demand. Regulators tend to equate discrimination with a difference in rates and nondiscrimination with rate uniformity — a tendency competitors naturally seek to exacerbate at every opportunity. Similarly, regulators may fail to distinguish economically efficient multipart pricing plans from unreasonable price discrimination.[17]

Price differences often occur precisely because the degree of competition is itself non-uniform. As noted, price differences can often be easily accounted for in simple terms of supply and demand. Increases in supply relative to demand imply lower prices. When a new firm enters a market, its addition to supply drives down the best price available to the incumbent. Is a price decrease in this

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[16] The would-be predator has a strong incentive to reach a cooperative solution if his/her threat is disregarded. Recognizing this, the threatened firm should see through the threat and not be deterred.

[17] As Richard Posner has observed:

> Multipart pricing resembles but must be distinguished from price discrimination. Under price discrimination, price varies with willingness to pay. But the purpose of price discrimination is not to enable fixed costs to be recouped in a manner that permits marginal purchasers to be served; it is to maximize the excess of revenues over costs. Multipart pricing is designed to maximize output consistently with avoiding a deficit; price discrimination is designed to maximize profits regardless of output consequences.

See Economic Analysis of Law (1977), pp. 261-262.

type of circumstance more accurately characterized as a predatory response to competition, or the simple market equilibration of supply and demand by a reduction in the market-clearing price? The proper goal for regulation is efficient pricing, not provision of a profit opportunity to new entrants through the maintenance of an inefficient pricing structure by regulatory fiat.

Pricing Discretion Under Price Caps

At the current margin of policy reform, the relevant issue is not whether LECs should be afforded complete pricing discretion, that is, whether LECs should be accorded the presumption that whatever rates they establish are likely to be economically efficient. It is, rather, whether marginal increments in pricing flexibility can be expected to increase aggregate economic welfare. There are a variety of reasons that suggest that increased flexibility would expand economic welfare:

- Firms have better knowledge of their costs and demands than do regulators. Prices set by regulators may generate economic waste because they are based on incorrect assumptions about costs and demands. Inefficient regulatory price-making may be especially serious in markets for discretionary services, where excessive prices may limit demand.

- The prospect of inefficient regulatory ratemaking reduces LECs' incentives to make efficient investments in telecommunications infrastructure. To the extent that inefficient pricing limits the ability to appropriate rewards from deployment of advanced technical capabilities, incentives to invest in such technology are attenuated.

- If firms have pricing flexibility, there is a natural tendency for rates to converge to quasi-optimal Ramsey prices.[18] The regulated firm, in pursuit of maximum profits, possesses incentives to price its services in a manner which maximizes economic welfare while satisfying requirements to recover costs and any social overhead burdens.

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[18] *See* Baumol and Sidak; I. Vogelsang and J. Finsinger, "A Regulatory Adjustment Process for Optimal Pricing by Multiproduct Monopoly Firms," *Bell Journal of Economics*, 10:157, 1979; and Ingo Vogelsang, *Price Cap Regulation of Telecommunications Services: A Long-Run Approach* (Santa Monica, CA: The RAND Corporation, 1988). As Baumol and Sidak (p. 54) note:

> Although the demand information available to management is highly imperfect, it seems likely that management will have a better and more up-to-date estimate of demand conditions than the regulator, who is so much further removed from the marketing firing line. In short, the firm can generally be taken to have superior information about demand and to have some considerable incentive to adapt its prices to demand conditions in roughly the manner that best serves the public interest. In this imperfect world, with its persistently incomplete and inaccurate demand information, this is probably the best that can be hoped for.

- The case for pricing discretion is especially strong where overhead costs can be clearly identified. In the interstate jurisdiction, NTS costs have the character of overheads. It is well-understood that NTS costs are not part of the incremental costs of interstate usage.[19] Consequently, there is little danger of cross-subsidy or anticompetitive pricing if LECs are given discretion in how to recover NTS costs. Even if the price of a service recovers little NTS costs, it will still cover its incremental costs *plus* any loadings of overhead costs, other than NTS. For that reason, there is considerable justification for giving LECs significantly greater flexibility in recovery of NTS costs — without any demonstration of competition.

New Services

The adverse economic consequences of regulatory administrative delays in the introduction of new telecommunications services have been well documented.[20] Again, an appropriate policy will not seek simply to minimize losses of a particular type, but rather to balance conflicting considerations — to optimize *tradeoffs*. Opponents of relaxed treatment for innovative services cite the possibility of monopolistic behavior and associated harms.[21] Balanced against such potential harms are any economic welfare benefits necessarily foregone as a result of regulatory delays. As noted, the latter have often proved to be quite substantial.

In both the regulated and nonregulated sectors of the economy, it is frequently the case that the suppliers of new services possess some market power, at least initially. Indeed, it is precisely the prospect of earning super-normal rewards which acts as a spur to invention and innovation.[22] The social utility of such incentives is even institutionally recognized in the patent system. When a LEC or any company introduces a new service, it may not face effective competition for some period of

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[19] In this regard, note that NTS costs are actually broader than the category that the Commission currently denotes as NTS. For example, they include the costs of main distributing frames. They also include a substantial portion of switching costs. Indeed, a federal-state Joint Board at one time determined that 75 percent of the costs of digital switching is NTS.

[20] For example, it has been estimated that the cost of delays in cellular licensing imposed economic welfare losses on the economy of a magnitude approximately equivalent to the amount of the savings and loan bailout. *See* Charles L. Jackson, Jeffrey H. Rohlfs and Tracey Kelly, *Estimate of the Loss to the United States Caused by the FCC's Delay in Licensing Cellular Telecommunications*, November 8, 1991 (revised).

[21] *See*, for example, MCI *Comments*, pp. 8-11.

[22] Joseph Schempeter's famous works, *Competition, Socialism and Democracy* and *A Theory of Economic Development*, describe this economic model.

time, and thus be in a position to exercise market power. But any rewards thus reaped operate as a reward for the introduction of new services which benefit the customer and as a signal for competitors to enter the market and compete. Regulatory control of prices may discourage innovation and stifle entry to the detriment of consumer welfare over the long term. Regulation of new services may well create barriers to competition and thus act to stifle competition in new services.

It is worth noting that in the United Kingdom, the FCC's counterpart, OFTEL, has cited the adverse consequences of regulating new services as a basis for not subjecting such services to explicit controls.[23] OFTEL's view is that any problems associated with anticompetitive behavior which might be identified in relation to new services can be dealt with through alternative means.

From an economic standpoint, a reasonable standard for evaluating the reasonability of the rates charged for a new service is whether (apart from promotional considerations) they can be expected to cover the incremental (direct) costs of supplying the service. The crux of the policy issue in this area involves the matter of an appropriate loading of overhead burdens for new services. Application of the inverse-(super)elasticity rule in the context of a new service would often imply negligible overhead loadings. New telecommunications services that supplement existing offerings generally represent a discretionary purchase and possess a high demand elasticity. They will not, for this reason, usually be able to sustain a high burden loading. This is not true of new services that *displace* basic services, which are then discontinued. Such new services are likely to be as essential as the service that they displace and thus will tend to display a less elastic demand warranting a heavier burden loading.

The Utility of a Policy Roadmap

LEC competitors naturally seek to couple achievement of their own policy objectives with regulatory relief for the LECs. Some go so far as to argue that the mere specification of a policy roadmap outlining the kinds of steps the Commission would likely adopt in consequence of certain

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[23] *See,* for example, Office of Telecommunications, *Effective Competition: Framework for Action (A Statement on the Future of Interconnection, Competition and Related Issues)*, July 1995; and Office of Telecommunications, *Pricing of Telecommunications Services from 1997 (Consultative Document on BT Price Controls and Interconnection Charging)*, December 1995.

changes in the markets it regulates is premature.[24] In our view, the specification of a clear policy roadmap constitutes sound policymaking and represents the essence of good policy planning.

A well-conceived policy roadmap that lays out specific actions the government plans to implement in the event that contemplated contingencies actually occur makes for continuity in policymaking, increases the credibility of the government's policy program and promotes efficient investment by removing uncertainty about the government's policy plans. Even if a policy roadmap did not possess these considerable abilities, there are no obvious disabilities which argue against it. To the contrary, there is generally substantial utility associated with careful contingency planning, which is why so many successful enterprises undertake such efforts. Not all contingencies can always be specified in advance and there may well be merit in periodic revisions in policy contingency plans to reflect new information and relevant new considerations. Nevertheless, the idea that the government affords all market participants a clear vision of what its policies are and what steps they can expect the government to take in particular circumstances strikes as transparently meritorious.

Given the benefits of careful contingency planning, failure to outline an adequate policy plan would itself entail foregoing these benefits and thus constitute a regulatory failure. Consider that the removal of uncertainty can only benefit those who would seek to profit through the exploitation of uncertainty. Markets for scarce capital resources (savings) can be expected to operate more efficiently to the extent that important sources of risk and uncertainty are reduced. To the extent that there is lack of information about the principal tenets of the government's policies and this scarcity of information distorts the efficient operation of the capital markets, prudent policy planning by the government can reduce uncertainty and improve efficiency. That can harm only those who would seek to profit from the exploitation of uncertainty and inefficiency. Profiting from the exploitation of uncertainty and inefficiency is not a bad thing; fomenting uncertainty and inefficiency to exploit is.

"Noise" is usually something to be abated rather than created. Providing a useful roadmap detailing its planned policy course is one means the government can utilize to reduce informational "noise" and promote more efficient operation of the market.

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[24] *See*, for example, MCI *Comments*, pp. 33-34.

Policy Triggers

Policymakers confront a difficult general problem: As long as they actively intervene in the markets whose self-policing properties they seek to assess, the market phenomena they observe must necessarily reflect effects of this intervention, potentially biasing results and rendering their significance unclear.[25] A policy of nonintervention may also obviously produce misleading results and pose difficulties for interpretation of actual results. The problem for policymakers is how to navigate between the Scylla and Charybdis of overly or inadequately interventionist policies.

For illustration, consider a hypothetical set of markets which are effectively monopolized and effectively regulated. The incumbent has a 100-percent market share in each market, but (assumedly) no power to raise price above the competitive level. Suppose costs vary in the different markets and that, instead of limiting the monopolist's prices to the competitive level, regulation requires rate-averaging — a uniform price is charged despite different costs. Prices now exceed costs in some markets and costs exceed prices in others. In the latter markets, the incumbent still has a 100-percent share but still possesses no market power. The causality between share and price is reversed — a low price leads to a large share. In the other markets, above-cost pricing attracts entry so that the incumbent's market share in these markets declines. But this decline is a byproduct of economically inefficient pricing and its interpretation is problematical.

In his submission,[26] Professor Bernheim cautions that evidence on competitive activity be weighed carefully because existing regulation has created departures from cost-based pricing and, while some services may appear to satisfy rigorous competitive criteria, it would be inappropriate to interpret such evidence as indicative of market discipline. Indeed, he claims that such evidence cannot be probative "until such time as regulatory 'taxes' and 'subsidies' no longer distort economic incentives."[27]

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[25] *See* John Haring, "Can Local Telecommunications Be Self-Policing?," *Telecommunications Policy*, Vol. 19, No. 2, March 1995.

[26] B. Douglas Bernheim, Lewis and Virginia Eaton Professor of Economics, Stanford University, "An Analysis of the FCC's Proposal for Streamlined Regulation of LEC Access Services," Appendix A of AT&T's *Comments*, dated December 5, 1995.

[27] Professor Bernheim's position appears to embody a kind of regulatory Catch 22: LECs cannot have pricing flexibility until markets become competitive, but markets can never be determined to be competitive unless greater

(continued...)

It seems to us that, given the "sunk" nature of capital investment in local telecommunications, one *could* properly interpret evidence of competition in the instant circumstance as indicative of market discipline.[28] Nevertheless, Professor Bernheim makes a valid general point which we have ourselves made on occasion[29] -- regulation *can* muddy the waters and make incisive assessment of competitive conditions difficult. It is, in general, important that regulators not bias the results of competitive experiments, lest they spoil the test and make interpretation of actual results difficult. But, that is, in our view, an argument for greater pricing flexibility to replicate an efficient pricing structure.

The irony of Professor Bernheim's position is that, having made a legitimate point about a harm of misregulation, he then turns immediately around (on the next page of his submission) and blesses use of a market share metric (30-percent share loss, measured in *subscribers*), the gaming of which is virtually guaranteed to cloud interpretation of marketplace results. If Professor Bernheim is worried about attaching undue significance to competitive indicia reflecting the market response to a heavily politicized, highly inefficient rate structure, he ought to be equally worried about the likely gaming of a share trigger.

If a market-share trigger were specified, both entrants and incumbents would respond to whatever the trigger is, so that its meaning and utility as a gauge of competition would be heavily compromised. Once the number of battles new competitors must win is specified in advance, their winning or failing to win that number of battles will signify little from the standpoint of competition. If the incumbent can benefit by shedding share, that is what it will seek to do. Similarly, a new

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[27] (...continued)
pricing flexibility is afforded, and distortions from inefficient pricing removed. We note again that strictly cost-based pricing is ultimately infeasible (unsustainable) and will result in economic inefficiency in the instant context. As Baumol and Sidak (p. 46) observe, "the prescription for marginal-cost pricing that flows from the equilibrium conditions of a perfectly competitive market will ensure the bankruptcy of firms subject to scale economies."

[28] In this case, entry may well have been a "mistake" resulting from a false price signal and resulting in an "artificial" industry structure. But the capital is both literally and figuratively *sunk* and not short-lived. It remains to compete and depress service prices The failure of market incumbents to lose share in the face of pricing policies which prevent such a loss from occurring is, of course, not surprising, nor does it tell us much about the actual potential 'competitiveness' of the relevant markets.

[29] *See*, for example, John Haring, "Implications of Asymmetric Regulation for Competition Policy Analysis," Federal Communications Commission, Office of Plans and Policy Working Paper Series No. 14, Washington, D.C. (December 1984); and Haring, *op. cit.*, (1995).

competitor, finding itself approaching the share trigger in any particular market, may very well find it advantageous to focus its competitive efforts elsewhere to avoid triggering regulatory relief for the incumbent. The problem of inefficient behavior prompted in response to a policy signal is a quite general problem: when a signal is specified, people respond to and 'game' the signal, often with adverse or perverse consequences.[30]

If the regulators' objective is *really* to learn whether markets for local telecommunications services can be self-policing, as opposed to simply seeing whether the *illusion* of competition in the form of some esteemed configuration of market shares can be synthesized, they should not, in effect prejudge results. The precise utility associated with creation of an efficient competitive process is the ability to discover the identity of efficient service providers. Market-share triggers undermine that capability; they are simply cartelization in drag.

Deployment of Productive Capacity as a Policy Trigger

In our earlier submission, we advocated that the Commission proceed as it did in the case of long-distance, and focus on an analytically relevant, empirically operational measure of the elasticity of market supply in the context of different services. In our view, the deployment of productive capacity constitutes tangible proof of competition's reality and credibility as a control mechanism. Deployment of capacity provides a meaningful basis for evaluative measurement and, because capacity additions are usually 'lumpy,' they may be utilized strategically to avoid policy triggers only with difficulty, if at all.

Use of a capacity policy trigger has been explicitly opposed by MFS.[31] MFS's argument, such as it is, is that supply responsiveness is "unreliable and ineffective" for "several" (*two*) reasons. First, LECs allegedly *may* dominate a market despite the availability of capacity from other sources. The meaning of dominance remains undefined, and MFS' evidence is an unsupported claim that LECs currently dominate all markets in the country. The substantial downward pressure on prices in those market segments where CAPs/CLECs compete plainly belies this claim. Dominance means market power, and market power is the ability to inflate prices profitably by restricting output. Where

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30 *See* Michael Spence, *Market Signalling* (1974).

31 *See* MFS *Comments*, pp. 7-8.

substitute sources of supply capacity are available, LECs' ability to inflate prices is significantly constrained.

MFS's second argument is that supply responsiveness is an "inexact and misleading" measure. The bases for this claim are the observations that fiber optic cable has theoretically unlimited capacity and a single fiber network presumably has the capacity to provide service to an entire service area. If these observations are correct, far from undermining the case for use of this type of measure, they make it with a vengeance. In his famous treatise on the *Foundations of Economic Analysis*, Economic Nobelist Paul Samuelson notes that:

> . . . it is easy to show that under uniform constant costs the demand curve for a firm is horizontal even though it produces 99.9 percent of all that is sold. . . . Economically if the firm were to begin to restrict output so as to gain monopoly profit, it would cease to sell 99.9 percent of the output or even anything at all. Consequently, it would not attempt to do so, but would find its maximum advantage in behaving like a pure competitor.[32]

Deployment of productive capacity, particularly easily expandable capacity that can readily exploit any profit opportunities, provides a highly credible indicator of competitive discipline. MFS' evidence, if anything, supplies support for regulatory streamlining to permit more vigorous competition in the face of competitive capacity deployments.

The inference that competition is effective in any particular market will generally reflect the existence of actual competitors competing successfully, that is, achieving significant market penetration and competitive profitability. But large market shares and high profitability for entrants are by no means necessary for effective competition. Indeed, these results may indicate that the incumbent is *not* competing effectively, perhaps because it is not allowed to do so. Conversely, firms in cartels sometimes possess significant market shares and make profits, though competition is effectively constrained. Government policies that create firms with these characteristics have not necessarily created competition. Government policy should seek to create conditions for an effective competitive process, and let the market determine the results.

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[32] *See* p. 79.

Market Definition

Issues of relevant geographic and product market definition have received some considerable attention in the filed comments. In the spirit of Landis and Posner's analysis of these issues,[33] our view is that market boundaries are often less important than getting a good handle on the core issue of substitutability. From the perspective of relevant product market definition, what services do consumers regard as close substitutes? From the perspective of relevant geographic market definition, what suppliers can bring effective supply capabilities to bear in particular circumstances. With respect to the latter, we regard the issue of drawing broad and narrow boundaries as somewhat academic. If boundaries are drawn narrowly, a proper analysis will take notice of the ease with which potential entrants can expand their operations, and draw an appropriate inference about actual substitution opportunities and the effectiveness of competition. If boundaries are drawn broadly, the set of competitors may be more inclusive, but will reflect the limited effectiveness of smaller competitors. A proper analysis should reach a similar conclusion regardless of which tack is selected.

As long as there is effective competition within whatever relevant market area is ultimately defined in the context of any particular issue, there appears little basis for opposition to regulatory streamlining within that area.[34] Antitrust focus is usually directed at the smallest relevant market in which competition is susceptible to being lessened. In the instant proceeding, several suggestions about an appropriate definition of relevant geographical markets have been proffered. These range from wire centers to whole metropolitan areas. In general, large relevant geographical markets may be more advantageous from an administrative perspective (reducing the number of markets that need to be considered), but these advantages in terms of ease of administration may come at some cost in terms of losses from lack of precision. It strikes us that a reasonable compromise approach might focus on competitive conditions within individual exchange areas which are typically larger than wire centers, but smaller than entire metropolitan areas. Focus on competitive conditions within modest-sized markets may avoid subjecting customers who lack competitive alternatives to any harms.

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[33] *See* "Market Power in Antitrust Cases," *Harvard Law Review* (March 1981).

[34] There appears to be some consensus in the *Comments* of the various interested parties that streamlining follow upon some more or less strenuous showing of competition.

Conclusion

Balanced against all the false claims that interexchange or exchange competition will be harmed by more economically efficient access pricing are three important adverse consequences that incontrovertibly follow from failure to promote efficient pricing:

(1) Consumers are harmed by restrictions of price competition. Even those consumers who are the prime targets of new competitive ventures will fare less well than they would with full freedom to lever all suppliers' offerings more effectively, including the offerings of incumbent suppliers.

(2) An economically artificial price structure simultaneously encourages uneconomic resource deployments and discourages economic resource deployment. Where prices are artificially inflated, pressures for new entrants to operate prudently and efficiently are reduced. When the day of reckoning inevitably arrives, the government will be subjected to intense pressure to maintain and even expand the degree of inefficiency embodied in the pricing structure to sustain the artificial industry structure its faulty decisions have engendered.

(3) With rigid regulatory handicapping of genuine price competition and an inefficient pricing structure, there is a substantial risk that a largely artificial industry structure will be created signifying little about what an efficient industry structure actually looks like and the extent of its self-policing properties.

If the Commission fails to permit efficient price competition, it runs a significant policy risk of, in effect, creating a cartel with all the attendant headaches cartel management implies. The Commission's task, properly conceived, is to create conditions conducive to the operation of a vigorous competitive process that will permit *the market to determine* the identity of efficient suppliers and an efficient configuration of supply that serves consumers' best interests. The market cannot succeed in achieving these important tasks if regulation prevents or inhibits the setting of efficient prices.

ATTACHMENT 2

REPLY STATEMENT OF

PROFESSOR JERRY A. HAUSMAN

Reply Statement of Professor Jerry A. Hausman

1. My name is Jerry A. Hausman. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139. My qualifications were given in my earlier statement which was submitted in this proceeding in response to the FCC's Second Further Notice of Proposed Rulemaking, CC Docket No. 94-1, FCC 95-393. (Second Notice)

2. I have been asked by BellSouth to respond to testimony introduced by other parties in this proceeding. I do not list every point that I disagree with; instead, I highlight the major areas of disagreement.

I. Association for Local Telecommunications Services

3. Mr. William Page Montgomery has submitted a filing entitled "Pre-Competitive Pricing Flexibility for Price Cap LECs". Mr. Montgomery makes two inconsistent claims. First he states that "Hundreds of million of dollars in available downward pricing flexibility remain unused at this time by the price cap LECs." (p. 2) Thus, he concludes that greater price flexibility is unneeded. (pp. 2-3) However, he then claims that if the LECs did make larger downward price reductions that "endogenous barrier to entry" might be the result. Mr. Montgomery fails to understand the basic economics of entry into telecommunications. A profit seeking firm such as a LEC will decrease its prices below the price cap when actual competitive entry occurs (or is soon expected to occur). Given the high proportion of sunk costs in telecommunications, this competitive entry creates large barriers to exit and low barriers to re-entry Thus, "endogenous barriers to entry" are not a reasonable possibility.